Windows 2000 Project Update

U.S. Army Strategic and Advanced Computing Center (SACC)
Office of the Director of Information Systems for Command

28 March 2001
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Purpose

The purpose of this briefing is twofold. First, to provide the current status of the Windows 2000 & Active Directory efforts to date.

Outline

- **Background & Status**
- **Schedule**
- **Pilot locations**
- **Enterprise Management**
- **Windows 2000 Project Team**

Background and Current Status

- 14 September 00: LTG Cuviello confirmed, milestone schedule, AD importance, and the project lead role
- 18 October 00: Formal agreements on ISEC work plan and ASC roles and responsibilities
- December – January 01: Initial delivery of *(CRADA)* equipment for validation lab and initial lab configuration
  - Development design documentation and Rapid Economic Justification
- January – 12 February 01: ASC and ISEC conduct initial lab validations of design and interoperability with Army infrastructure
  - Further testing terminated due to lack of funding for ASC and ISEC
- 19 February – 23 February 01: Microsoft Army Conference
  - LTG Cuviello expressed his support for implementing Active Directory
  - Executive Session: Gain General Officer support to restart & accelerate the testing
  - Microsoft CEO guarantee the Army success; will provide resources
- 26 February – 02 March 01: Developed accelerated pilot plan
  - Aligned Microsoft, Compaq and other resources for 30 day planning session starting 05 March

Background and Current Status

- 26 February – 02 March 01: Developed accelerated pilot plan
  - Aligned Microsoft, Compaq, FastLane and other resources for 30 day planning session starting 05 March
- 26-30 March 01: Preliminary Design Review Meeting
  - Test Pilot system engineers and cooperative partners
  - Validated enterprise design archciterual & local test pilot design
  - Develop Time Line matrix for VPN and DCPRMO start dates
- 30 March 01: COMPAQ CRADA consulting services completed
- 9-13 April 01: Army DOIM Conference & Requirements Session
  - Windows 2000 AD Panel Discussion
  - TRADOC Windows 2000 Requirements Session
- 20 April – 30 June 01:Migration period for test pilots to join the root

Document— Matrix

- **Design goals LTC McHargue**
- **DHCP   LTC McHargue**
- **Disaster Recovery Larry Barker**
- **DNS   Larry Barker**
- **Group Design   MAJ Burgard**
- **Naming Standard & Conventions MAJ Robinson**
- **OU Design   MAJ Burgard**
- **AD Architecture   LTC McHargue**
- **Pilot rollback plan (root)   Larry Barker**
- **Pilot site assessment and report   Rod Simmons**
- **Pilot test cases   Matthew Misner**
- **Pilot test plan   Jackie Tregre**
- **VPN Routing & Remote Access Service   Jason Voyles**
- **WINS   LTC McHargue**

Date	Action	Resource
2 Mar 01	WIN2K Update and pilot strategy briefing	Ms. Browning / MG Davidson
5-9 Mar 01	Sequestered WIN2K pilot planning session 0900-1700 Daily and daily conference call Develop detailed design documentation	WIN2K Team, MCS, Compaq, Fastlane, NetIQ, ASC, & ISEC
12-16 Mar 01	Sequestered WIN2K pilot planning session continues	Same as above
14 Mar 01	Suspense for email distribution and posting to the collaborative site of draft design documents from participants for peer review	WIN2K Team and MACOMs
19-23 Mar 01	Sequestered WIN2K pilot planning session continues 1300-1500 21 March VTC with pilot participants	WIN2K Team, MCS, Compaq, Fastlane, NetIQ, ASC, & ISEC
>26-30 Mar 01	**Fort Huachuca (MACOMs fund their own TDY) complete all required pilot implementation documentation**	Pilots send 2 attendees (engineers who provided design specs and participated in VTC)
03 April 01	Begin pilot implementation (assumes root operational) and pilot participants readiness to implement the agreed upon design. Fulfill all criteria to join the pilot root	ASC controls sequential joining of the root based on developed criteria
03 June 01	14 Pilot location complete joining the pilot root	Pilot locations and ASC
03 June – 03 July 01	Conduct functional tests	ASC lead and ISEC support
03 July – 04 Aug 01	Refine and document architectural changes	WIN2K Team, MCS, Compaq, Fastlane, NetIQ, ASC, & ISEC
Sept – Oct 01	Initial Operational Capability	TBD-initial pilot participant

Active Directory pilot locations

USARPAC
FT Shafter, HI

USMA
West Point, NY

USAREUR
Heidelberg, FRG

ds.army.mil

USAR
Alexandria, VA

ATEC
Falls Church, VA

NGB
Alexandria, VA

SACC
FT Belvoir, VA

AMD / SMDC
Huntsville, Al

ASC / ISEC
FT Huachuca, AZ

MEDCOM
San Antonio, TX

FORSCOM
FT McPherson, GA

Army War College
Carlisle, PA
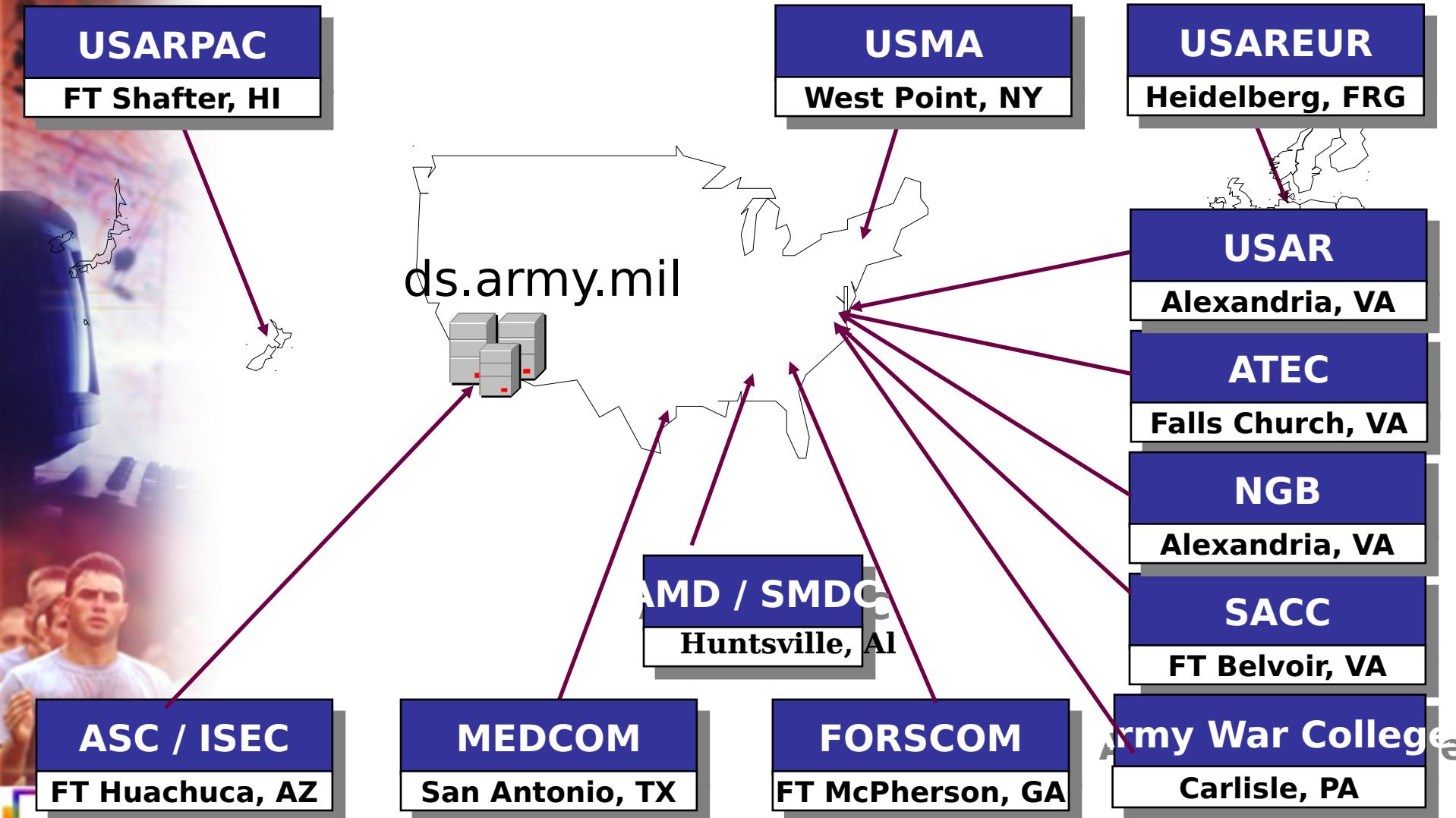
Lab Validation—Outcomes

- Determine interoperability with Army protected DNS
- Determine interoperability with the DoD PKI digital certificates for IPSec secured communication between servers
- Determine interoperability with existing Army firewall/ IDS products and configuration
- ASC and ISEC gain experience with Windows 2000
- Gain experience and document installation and maintenance procedures for ds.army.mil root domain
- Validate and document initial pilot topology

Enterprise Management

US Army Signal Command
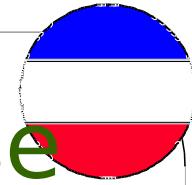
## What Is ASC Enterprise Management

Source:
**ASC Briefing
05 March 01**

- Command, Control, Operate, and Sustain the Top Lev (Root) Infrastructure (CTNOSC Root + TNOSC Theate Support/Redundancy)

- Configuration Manage Technical Change Control for Enterprise Assets (Version Control/Patches/Fixes to th Desk Top Via AD Domain Managers)

- Support for Domain Managers Includes AD Availabilit and Integration of Third Party Tools (Installation/Site/MACOM)

- Support for Migration of Prepared Installations

Local (Installation) Administrators

top level ou

2nd level ou

3rd level ou
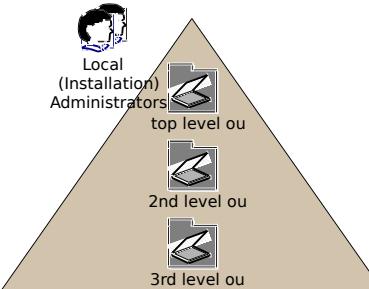
Army Signal Command
(Enterprise Management)

ISA

Geographic Domain

Manage:
-Infrastructure components health
-Site link status
-Replication metrics
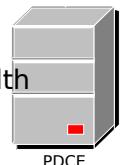
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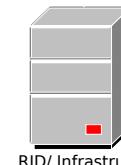
RID/ Infrastructure

WINS/ DHCP

Global Catalog

Mail Servers

Web Servers

Application Servers

Print / File Servers
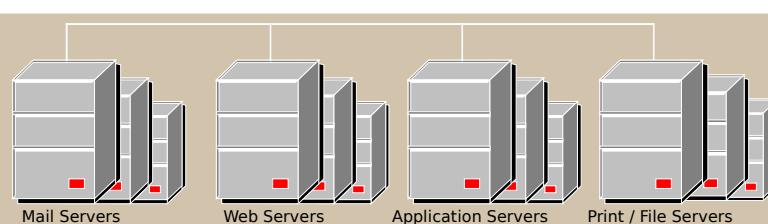
Installation Domain (Geographic model)

Replication

* Replication latency

* Replication topology

* Replication errors and failures

* Replication partner problems

* Replication cycle slowness

* Replication conflict concerns

Active Directory-Related DNS

* DNS server/service status

* Status of domain controller SRV records

* DNS response time

* DNS zone conflict problems

Operations Masters (FSMO roles, both forest and domain)

* Operations Master consistency, availability, and placement

Domain Controllers

* CPU loads

* LDAP loads and response rates

* Trust relationships

* GPO inconsistencies

Global Catalogs

* Global Catalog response time

* Global Catalog load

* Global Catalog replication latency concerns

Domains

* Domain replication latency

* Domain replication topology

* Consistency of DNS records with Active Directory domains

* Status of each DC in the domain

Sites

* Inter-site and intra-site replication topology generation

* Global catalog status

* Number of global catalogs in the site

* Status of each DC within the site

* Status of each DNS server within the site

Way Ahead

- **3rd QTR FY 01: Finalize roles and duties**
  - **PM DMS recommended as Win2K PM**
  - **Redefine the pilot documentation**

- **4th QTR FY 01: Publish Win2K AD Policy**
  - **Introduce Exchange 2000 into test pilot**
  - **Extend the scope of VPN to support collaboration**

Organization—
Advanced Technology Integration Group

LTC Mike McHargue
Team Leader
703.704.3672
Mike.McHargue@us.army.mil

Role: **ATIG lead**
Responsibilities: Overall WIN2K responsibility—research and evaluate: interoperability with AKO, Windows 2000, and Global Directory Services, DoD PKI, Public Key Infrastructure service technologies, messaging and automated messaging handling systems, Networking, and other technology initiatives

MAJ Earl Robinson
Assistant Team Leader
703.704.3738

Role: **Windows 2000 AD Project Management**
Responsibilities: Budget, schedule, training, policy, and project documentation

Mr. Stephen Bates
Enterprise SME
703.704.xxx
Stephen.Bates@us.army.mil

Role: Enterprise implementation
Responsibilities: Public Key Infrastructure, MGS (Exchange 2000), advanced collaboration, Active Directory management (3rd party tools, security—firewalls, Intrusion Detection Software, and other Information Assurance issues

Mr. Matthew Misner
Lab Director
703.704.xxx
Matthew.Misner@us.army.mil

Role: Local lab and pilot implementation
Responsibilities: Act as the interface for lab architecture(s), procure equipment, implementation, configuration management, documentation, test development and execution